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Docket No. PD-89418A

**REMARKS**

Applicants wish to thank the Examiner for considering the present application. In the Office Action dated January 25, 2005, Claims 1-19 are pending in the application. The allowability of Claims 16-19 and the allowability of Claims 8 and 10 if rewritten in independent form is acknowledged. Applicants respectfully request the Examiner to reconsider the present application.

The disclosure stands objected to for two different formalities. On page 5, paragraph 28, line 4, the mention of radiating elements 24 was not illustrated in Fig. 2. Applicants have amended Fig. 2 to have reference numeral 24 thereon.

Page 9, line 42, has been corrected from "Nyquest" to "Nyquist."

Claim 1 stands objected to for several informalities. Claim 1, line 8, has been amended to refer to the received signals as amplified received signals after processing through the low noise amplifier.

Claim 5, line 3, has been amended to clarify the definition of A. The Examiner also states that "fs" is not defined within the claim. Applicants respectfully submit that the second word of line 3 defines the sampling frequency as fs.

Claim 6, line 3, has been amended to correct the frequencies therein. The specification specifically refers to frequency bands up to C band in paragraph 50 of the specification. The up to C band includes L band and S band. Also, the C band is part of the super high frequency range. Therefore, it is respectfully submitted that the super high frequency range also has antecedent basis by stating that up to C band may be included. The Examiner is referred to [www.ntia.doc.gov/osmhome/allochrt.pdf](http://www.ntia.doc.gov/osmhome/allochrt.pdf) for the government's frequency allocation. The very bottom illustrates an example of the radio spectrum. The specification also states in line 26 that the technology may be applied in frequency ranges above C band as the technology improves. Therefore, Applicants respectfully submit that the wording "and frequency bands above C band" are supported

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in the specification. Applicants therefore respectfully request the Examiner to reconsider this rejection.

Claims 5 and 6 stand rejected under 35 U.S.C. §112, first paragraph, for failing to comply with the enablement requirement. The Examiner states that Claim 5, line 3, the term *fs* is not defined within the specification. The Examiner is directed to paragraph 34 which states that *fs* is the sampling the frequency.

Claim 6, line 3, is also objected to. Claim 6, as mentioned above, has had the EHF removed and the wording frequency bands above C band inserted therein. Applicants believe that the above amendments overcome this rejection.

Claims 1, 2, 3, 4, 7, 9, 11, 13, 14, and 15 stand rejected under 35 U.S.C. §102(a) as being unpatentably by the admitted prior art of the instant application. Applicants respectfully submit that the wording of Claim 1 now corresponds to former Claim 8. Therefore, Applicants respectfully submit that Claims 1, 2, 3, 4, and 7 are believed to be allowable.

Claim 9 has also been amended to incorporate the wording of former Claim 10 therein. Applicants therefore respectfully submit that Claim 9 is now allowable.

Claims 11, 13 and 14 are also believed to be allowable since they are dependent from Claim 9.

Claim 15 has also been amended to include language similar to that of Claims 8 and 10. Therefore, independent Claim 15 is also believed to be allowable.

Claims 16-19 were previously indicated as allowable by the Examiner. Applicants have, however, amended Claims 16, 17, 18, and 19 in a similar manner to Claim 1 in that once the signal is received and amplified by the low noise amplifier, the received signals are referred to as "amplified received signals."

Claims 6 and 12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the admitted prior art of the instant application. Claims 6 and 12 are also believed to be allowable for the same reasons set forth above with respect to Claims 1 and 9. Applicants therefore respectfully request the Examiner for reconsideration of these claims.

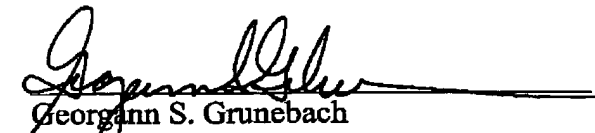
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In light of the above amendments and remarks, Applicants submit that all objections and rejections are now overcome. The application is now in condition for allowance and expeditious notice thereof is earnestly solicited. Should the Examiner have any questions or comments which would place the application in better condition for allowance, he is respectfully requested to call the undersigned attorney.

Respectfully submitted,

  
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